		Exploring Aeror	nautics				
2007 Mathematics Grade and Course Level Expectations							
Grade 5	01.1	04 1 1					
Activity/Lesson	State	Standards					
Fundamentals of Aeronautics (145-176)	МО	MA.5.A.1.B.1	represent and analyze patterns using words, tables and graphs				
Fundamentals of Aeronautics (145-176)	МО	MA.5.A.3.A.1	model problem situations and draw conclusions, using representations such as graphs, tables or number sentence				
Fundamentals of Aeronautics (145-176)	МО	MA.5.M.1.B.1	identify the equivalent weights and equivalent capacities within a system of measurement				
Fundamentals of Aeronautics (145-176)	МО	MA.5.D.1.A.1	describe methods to collect, organize and represent categorical and numerical data				
Fundamentals of Aeronautics (145-176)	МО	MA.5.D.1.C.1	describe methods to collect, organize and represent categorical and numerical data identify and justify the unit of measure for area				
Wings(177-208)	МО	MA.5.M.1.A.1	(customary and metric)				
Science of Flight	МО	MA.5.A.3.A.1	model problem situations and draw conclusions, using representations such as graphs, tables or number sentence identify the equivalent weights and equivalent				
Science of Flight	МО	MA.5.M.1.B.1	capacities within a system of measurement				
Science of Flight	МО	MA.5.D.1.A.1	describe methods to collect, organize and represent categorical and numerical data				
Science of Flight	МО	MA.5.D.1.C.1	describe methods to collect, organize and represent categorical and numerical data				
Integrating with Aeronautics	МО	MA.5.N.3.D.1	estimate and justify products, and quotients of whole numbers and sums differences of decimals and fractions				
Integrating with Aeronautics	МО	MA.5.A.1.B.1	represent and analyze patterns using words, tables and graphs				
Integrating with Aeronautics	МО	MA.5.A.2.A.1	using all operations, represent a mathematical situation as an expression or number sentence using a letter or symbol model problem situations and draw conclusions,				
Integrating with Aeronautics Integrating with	МО	MA.5.A.3.A.1	using representations such as graphs, tables or number sentence given a net of a prism or cylinder, identify the 3-				
Aeronautics	МО	MA.5.G.4.A.1	dimensional shape				
Intro to Aeronautics (109-123) Intro to Aeronautics	МО	MA.5.D.1.A.1	describe methods to collect, organize and represent categorical and numerical data describe methods to collect, organize and				
(109-123)	МО	MA.5.D.1.C.1	represent categorical and numerical data				
Scientific Method(124-144)	MO	MA.5.A.3.A.1	model problem situations and draw conclusions, using representations such as graphs, tables or number sentence				

Activity/Lesson	State	Standards	
Grade 7			
Missouri Mathematics	S		
		rade and Course Leve	l Expectations
		2007 Mathema	atics
		Exploring Aeror	 nautics
144)	МО	MA.6.D.1.A.1	data about a characteristic
Scientific Method(124-	IVIO	IVIA.0.D. T.A. I	formulate questions, design studies and collect
Intro to Aeronautics (109-123)	MO	MA.6.D.1.A.1	formulate questions, design studies and collect data about a characteristic
Aeronautics	MO	MA.6.M.2.E.1	of measurement (mass and weight)
Integrating with			convert from one unit to another within a system
Integrating with Aeronautics	MO	MA.6.A.3.A.1	model and solve problems, using multiple representations such as tables, expressions and one-step equations
Integrating with Aeronautics	MO	MA.6.A.2.A.1	use symbolic algebra to represent unknown quantities in expressions or equations and solve one-step equations
Integrating with Aeronautics	МО	MA.6.A.1.B.1	represent and describe patterns with tables, graphs, pictures, symbolic rules or words
Integrating with Aeronautics	МО	MA.6.N.3.E.1	solve problems using ratios and rates
Science of Flight	МО	MA.6.D.1.A.1	formulate questions, design studies and collect data about a characteristic
Science of Flight	МО	MA.6.M.2.E.1	convert from one unit to another within a system of measurement (mass and weight)
The Resource Center	МО	MA.6.N.1.A.1	apply and understand whole numbers to millions, fractions and decimals to the thousandths (including location on the number line)
Fundamentals of Aeronautics (145-176)	МО	MA.6.D.1.A.1	formulate questions, design studies and collect data about a characteristic
Fundamentals of Aeronautics (145-176)	МО	MA.6.A.3.A.1	model and solve problems, using multiple representations such as tables, expressions and one-step equations
Fundamentals of Aeronautics (145-176)	МО	MA.6.A.1.B.1	represent and describe patterns with tables, graphs, pictures, symbolic rules or words
Activity/Lesson	State	Standards	
Grade 6			
Missouri Mathematics			·
	G	rade and Course Leve	
		2007 Mathema	
,		Exploring Aeror	
144)	МО	MA.5.D.1.C.1	represent categorical and numerical data
144) Scientific Method(124-	MO	MA.5.D.1.A.1	represent categorical and numerical data describe methods to collect, organize and
Scientific Method(124-	140	MA 5 D 4 A 4	describe methods to collect, organize and

	1	1	
Fundamentals of			identify functions as linear or nonlinear from
Aeronautics (145-176)	MO	MA.7.A.1.D.1	tables, graphs or equations
Actoriautics (140-170)	IVIO	WA.T.A.T.D.T	model and solve problems, using multiple
Fundamentals of			representations such as graphs, tables,
Aeronautics (145-176)	MO	MA.7.A.3.A.1	expressions, and linear equations
Aeronaulics (145-170)	IVIO	IVIA.1.A.J.A.1	use tools to measure angles to the nearest
Fundamentals of			
Fundamentals of		7.1.0.0.4	degree and classify the angle as acute, obtuse,
Aeronautics (145-176)	MO	MA.7.M.2.B.1	right, straight, or reflex
			identify the equivalent area and volume
l			measures within a system of measurement
Wings(177-208)	MO	MA.7.M.1.B.1	(e.g., sq ft. to sq in, m³ to c m³)
			solve problems involving circumference and/or
			area of a circle and surface area/volume of a
Wings(177-208)	MO	MA.7.M.2.C.1	rectangular or triangular prism, or cylinder
Integrating with			solve problems involving proportions, such as
Aeronautics	MO	MA.7.N.3.E.1	scaling and finding equivalent ratios
			use symbolic algebra to represent unknown
Integrating with			quantities in expressions or equations and solve
Aeronautics	MO	MA.7.A.2.A.1	linear equations with one variable
			use coordinate geometry to construct and
Integrating with			identify geometric shapes in the coordinate
Aeronautics	MO	MA.7.G.2.A.1	plane using their properties
Acionaulios	IVIO	IVIA.7.0.2.A.1	plane using their properties
		⊥ Exploring Aerona	outice.
		2007 Mathemat	
	Crada ar		
Missouri Mathematics		nd Course Level	Expectations
Grade 8			
	Ctoto	Ctondordo	
Activity/Lesson	State	Standards	
Filindamentale of			solve problems of angle measure, including
Fundamentals of			those involving triangles and parallel lines cut by
Aeronautics (145-176)	МО	MA.8.M.2.B.1	
	МО	MA.8.M.2.B.1	those involving triangles and parallel lines cut by a transversal
Aeronautics (145-176)	МО	MA.8.M.2.B.1	those involving triangles and parallel lines cut by a transversal compare different representations of the same
Aeronautics (145-176) Fundamentals of			those involving triangles and parallel lines cut by a transversal compare different representations of the same data and evaluate how well each representation
Aeronautics (145-176)		MA.8.M.2.B.1 MA.8.D.2.B.1	those involving triangles and parallel lines cut by a transversal compare different representations of the same data and evaluate how well each representation shows important aspects of the data
Aeronautics (145-176) Fundamentals of			those involving triangles and parallel lines cut by a transversal compare different representations of the same data and evaluate how well each representation
Aeronautics (145-176) Fundamentals of			those involving triangles and parallel lines cut by a transversal compare different representations of the same data and evaluate how well each representation shows important aspects of the data
Aeronautics (145-176) Fundamentals of			those involving triangles and parallel lines cut by a transversal compare different representations of the same data and evaluate how well each representation shows important aspects of the data describe the relationship between the scale
Aeronautics (145-176) Fundamentals of Aeronautics (145-176)	МО	MA.8.D.2.B.1	those involving triangles and parallel lines cut by a transversal compare different representations of the same data and evaluate how well each representation shows important aspects of the data describe the relationship between the scale factor and the area of the image using a dilation (stretching/ shrinking)
Aeronautics (145-176) Fundamentals of Aeronautics (145-176) Wings(177-208)	МО	MA.8.D.2.B.1	those involving triangles and parallel lines cut by a transversal compare different representations of the same data and evaluate how well each representation shows important aspects of the data describe the relationship between the scale factor and the area of the image using a dilation (stretching/ shrinking) model and solve problems, using multiple
Aeronautics (145-176) Fundamentals of Aeronautics (145-176) Wings(177-208) Integrating with	МО	MA.8.D.2.B.1 MA.8.G.3.B.1	those involving triangles and parallel lines cut by a transversal compare different representations of the same data and evaluate how well each representation shows important aspects of the data describe the relationship between the scale factor and the area of the image using a dilation (stretching/ shrinking) model and solve problems, using multiple representations such as graphs, tables, and
Aeronautics (145-176) Fundamentals of Aeronautics (145-176) Wings(177-208)	МО	MA.8.D.2.B.1	those involving triangles and parallel lines cut by a transversal compare different representations of the same data and evaluate how well each representation shows important aspects of the data describe the relationship between the scale factor and the area of the image using a dilation (stretching/ shrinking) model and solve problems, using multiple representations such as graphs, tables, and linear equations
Aeronautics (145-176) Fundamentals of Aeronautics (145-176) Wings(177-208) Integrating with	МО	MA.8.D.2.B.1 MA.8.G.3.B.1	those involving triangles and parallel lines cut by a transversal compare different representations of the same data and evaluate how well each representation shows important aspects of the data describe the relationship between the scale factor and the area of the image using a dilation (stretching/ shrinking) model and solve problems, using multiple representations such as graphs, tables, and linear equations describe, classify and generalize relationships
Aeronautics (145-176) Fundamentals of Aeronautics (145-176) Wings(177-208) Integrating with	МО	MA.8.D.2.B.1 MA.8.G.3.B.1	those involving triangles and parallel lines cut by a transversal compare different representations of the same data and evaluate how well each representation shows important aspects of the data describe the relationship between the scale factor and the area of the image using a dilation (stretching/ shrinking) model and solve problems, using multiple representations such as graphs, tables, and linear equations describe, classify and generalize relationships between and among types of a) 2-dimensional
Aeronautics (145-176) Fundamentals of Aeronautics (145-176) Wings(177-208) Integrating with Aeronautics	МО	MA.8.D.2.B.1 MA.8.G.3.B.1	those involving triangles and parallel lines cut by a transversal compare different representations of the same data and evaluate how well each representation shows important aspects of the data describe the relationship between the scale factor and the area of the image using a dilation (stretching/ shrinking) model and solve problems, using multiple representations such as graphs, tables, and linear equations describe, classify and generalize relationships between and among types of a) 2-dimensional objects and b) 3- dimensional objects using their
Aeronautics (145-176) Fundamentals of Aeronautics (145-176) Wings(177-208) Integrating with Aeronautics Integrating with	MO MO	MA.8.D.2.B.1 MA.8.G.3.B.1 MA.8.A.3.A.1	those involving triangles and parallel lines cut by a transversal compare different representations of the same data and evaluate how well each representation shows important aspects of the data describe the relationship between the scale factor and the area of the image using a dilation (stretching/ shrinking) model and solve problems, using multiple representations such as graphs, tables, and linear equations describe, classify and generalize relationships between and among types of a) 2-dimensional objects and b) 3- dimensional objects using their defining properties including Pythagorean
Aeronautics (145-176) Fundamentals of Aeronautics (145-176) Wings(177-208) Integrating with Aeronautics Integrating with	МО	MA.8.D.2.B.1 MA.8.G.3.B.1	those involving triangles and parallel lines cut by a transversal compare different representations of the same data and evaluate how well each representation shows important aspects of the data describe the relationship between the scale factor and the area of the image using a dilation (stretching/ shrinking) model and solve problems, using multiple representations such as graphs, tables, and linear equations describe, classify and generalize relationships between and among types of a) 2-dimensional objects and b) 3- dimensional objects using their
Aeronautics (145-176) Fundamentals of Aeronautics (145-176) Wings(177-208) Integrating with Aeronautics	MO MO	MA.8.D.2.B.1 MA.8.G.3.B.1 MA.8.A.3.A.1	those involving triangles and parallel lines cut by a transversal compare different representations of the same data and evaluate how well each representation shows important aspects of the data describe the relationship between the scale factor and the area of the image using a dilation (stretching/ shrinking) model and solve problems, using multiple representations such as graphs, tables, and linear equations describe, classify and generalize relationships between and among types of a) 2-dimensional objects and b) 3- dimensional objects using their defining properties including Pythagorean Theorem
Aeronautics (145-176) Fundamentals of Aeronautics (145-176) Wings(177-208) Integrating with Aeronautics Integrating with Aeronautics	MO MO	MA.8.D.2.B.1 MA.8.G.3.B.1 MA.8.A.3.A.1	those involving triangles and parallel lines cut by a transversal compare different representations of the same data and evaluate how well each representation shows important aspects of the data describe the relationship between the scale factor and the area of the image using a dilation (stretching/ shrinking) model and solve problems, using multiple representations such as graphs, tables, and linear equations describe, classify and generalize relationships between and among types of a) 2-dimensional objects and b) 3- dimensional objects using their defining properties including Pythagorean Theorem compare different representations of the same
Aeronautics (145-176) Fundamentals of Aeronautics (145-176) Wings(177-208) Integrating with Aeronautics	MO MO	MA.8.D.2.B.1 MA.8.G.3.B.1 MA.8.A.3.A.1	those involving triangles and parallel lines cut by a transversal compare different representations of the same data and evaluate how well each representation shows important aspects of the data describe the relationship between the scale factor and the area of the image using a dilation (stretching/ shrinking) model and solve problems, using multiple representations such as graphs, tables, and linear equations describe, classify and generalize relationships between and among types of a) 2-dimensional objects and b) 3- dimensional objects using their defining properties including Pythagorean Theorem